Atty Dkt. No.: ORIN-002

USSN: 10/634,743

AMENDMENTS TO THE CLAIMS:

1. **(Withdrawn)** A vaccine composition comprising autologous mature dendritic cells (DC) pulsed with inactivated human immunodeficiency virus (HIV).

- 2. (Withdrawn) The vaccine composition of claim 1, wherein said HIV is HIV-1.
- 3. (Withdrawn) The vaccine composition of claim 2, wherein said HIV-1 is R5 HIV-1 JR-CSF.
- 4. **(Withdrawn)** The vaccine composition of claim 1, wherein said DC is derived from peripheral blood mononuclear cells (PBMC).
- 5. **(Withdrawn)** The vaccine composition of claim 1, wherein said DC is prepared by culturing the PBMC in medium containing granulocyte-macrophage colony stimulating factor (GM-CSF) and human interleukin-4 (IL-4).
- 6. **(Withdrawn)** The vaccine composition of claim 5, wherein the PBMC is further cultured in medium containing human interferon-beta (IFN-beta).
- 7. (Currently Amended) An HIV-1-infection suppression factor which <u>suppresses R5 HIV-1</u> infection, wherein said suppression factor is produced by human CD4⁺ primed with dendritic cells (DC) pulsed with inactivated HIV-1 and has a molecule molecular weight of more than 100 kDa, is not absorbed to heparin-Sepharose columns, and is inactivated by heating at 56 degree degrees Celsius for 30 min.

8. (Canceled)

9. (Currently Amended) The HIV-1-infection suppression factor of claim 7, wherein the HIV-1 is R5 HIV-1 JR-CSF.

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10. (Currently Amended) The HIV-1-infection suppression factor of claim 7, wherein the factor is not lost its suppression activity by subjecting to neutralizing antibodies against human RANTES, MIP-1-alpha, MIP-1-beta, IFN-alpha, IFN-beta, IFN-gamma, IL-4, IL-10, IL-13, IL-16, MCP-1, MCP-3, TNF-alpha or TNF-beta.

- 11. (Currently Amended) The HIV-1-infection suppression factor of claim 7, wherein the factor is not lost its suppression activity by subjecting to anti-beta-chemokine antibodies.
- 12. **(Withdrawn)** A method for the vaccination against HIV comprising administering autologous mature DC pulsed with inactivated HIV to a subject to be vaccinated.
 - 13. (Withdrawn) The method of claim 12, wherein said HIV is HIV-1.
 - 14. (Withdrawn) The method of claim 13, wherein said HIV-1 is R5 HIV-1 JR-CSF.
- 15. (Withdrawn) A method for the vaccination against HIV comprising: collecting PBMC from a subject to be vaccinated, culturing the PBMC in medium containing GM-CSF and human IL-4 to prepare autologous mature DC, pulsing the DC with inactivated HIV, and administering the DC to the subject.
- 16. (Withdrawn) The method of claim 15, which further includes culturing the PBMC in medium containing IFN-beta.
 - 17. (Withdrawn) The method of claims 15 or 16, wherein said HIV is HIV-1.
 - 18. (Withdrawn) The method of claims 17, wherein said HIV-1 is R5 HIV-1 JR-CSF.